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METHOD AND SYSTEM FOR IDENTIFYING MALFUNCTIONING COMBUSTION CHAMBER IN A GAS TURBINE

ABSTRACT OF THE DISCLOSURE

A combustion chamber graphic analyzer (CCGA) computer software application has been developed for analyzing the performance of individual combustion chambers in an operating gas turbine. The CCGA identifies combustion chambers that are sustaining abnormally hot or cold combustion temperatures. The identification of hot or cold combustion chambers is graphically displayed by the CCGA on a computer display, printed report or other computer output. Whether a combustion chamber is operating hot or cold is determined based on a circumferential profile of the temperatures of the exhaust gases from the gas turbine. This circumferential temperature profile is rotated using a swirl angle to correlate the exhaust gas temperature profile with the circular array of combustion chambers.